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Response to Official Action

In the Specification

Attached hereto on separate sheet is a replacement abstract.

Please insert the following headings into the specification:

Between paragraphs [0002] and [0003] insert "BACKGROUND OF THE INVENTION."

Between paragraphs [0007] and [0008] insert "SUMMARY OF THE INVENTION."

Between paragraphs [0032] and [0033] insert "BRIEF DESCRIPTION OF THE

DRAWINGS."

Between paragraphs [0043] and [0044] insert "DETAILED DESCRIPTION OF THE

**INVENTION.**"

After paragraph [0059] insert the phrase "What is claimed is:"

Please amend the following paragraphs as follows:

Paragraph 45

Assembled as shown in FIG. 1, the inner disc 12 and the outer disc 13 are separated by

a layer of rubber 16 which may be formed in situ. Rubber layer 16 may be comprised of

one or more layers of various types of elastomeric materials. Rubber layer 16 may also

have disposed within it an interleaved rigid layer, formed of thin metal, resin, glass fiber,

or the like, as seen in **FIG. 3A**. The rubber layer **16** is bonded to each of the outer disc

13 and the inner disc 12 to allow relative movement therebetween. Each inner disc is provided with a central bore indicated generally at 17 to define a central lumen through the centre of the device to accommodate a power supply and control mechanism for a work head at an extremity of the arm. Each link 11 may be formed from a pair of "link halves" which are best indicated in FIG. 2. Each link half comprises an outer link member 13, an inner link member 12 and a rubber disc or shell 16 adapted to be inserted between the two. The components may be bonded together to form a half link portion, which may then be joined together with adjacent components to form the continuous segment of links. It will be noted that the concave surface 21 of outer link element 13 is adapted to cooperate with the corresponding under surface (as shown in FIG. 2) of element 12. The disc 16 is shaped to be accommodated between the two and the components may be bonded together. This can be best seen from FIG. 3A which shows a section through the bonded components.

## Paragraph 47

Each segment nay may be provided with an end cap 30 (see FIG. 4) which is provided with peripheral spaced wire accommodating holes and with an enlarged recess 26 including an anchorage means ferrule 27 affixed to the end of a control wire 28. Said anchorage means 27 could comprise, for example, a ferrule or cap. In assembling the device, the end cap 30 is secured to the adjacent outer disc portion 13 of the end link and the control wires 28 are threaded through the appropriate recess wire conduit means 26 in the end cap 30 and then through mating holes 25 in each of the outer disc Page 4

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portions 13 for each link in the segment.

## Paragraph 49

The ends of the wires are passed back so to actuators and are tensioned until the ferrule **27** is brought against the back plate to maintain the assembly under tension. By tensioning the assembly in this way, it is possible to avoid the bonding of the components shown in FIGS. 5, 6, and 7, the mating faces of the inner and outer discs may be appropriately grooved to accommodate a correspondingly profile rubber disc 16. Rubber disc 16 may be comprised of one or more layers of various types of elastomeric materials. Rubber disc 16 may also have disposed within it an interleaved rigid layer, formed of thin metal, resin, glass fiber, or the like, as seen in FIG. 5. These grooves or profiling serves to key the disc 16 in position between the inner and outer discs 12 and 13 respectively and yet allows for movement of one with respect to the other in response to changes in tension in the control wires 28. This avoids the need for bonding of the discs and allows for relatively easy replacement of damaged components within any given segment.